

JUN 30 1994

Michael J. Schumacher
Brinefield Projects Manager
Akzo Salt, Inc.
Abington Executive Park
P.O. Box 352
Clarks Summit, Pennsylvania 18411-0352

Re: UIC Permit No. NYU063860
Well 58
Watkins Glen, New York

Dear Mr. Schumacher:

The U.S. Environmental Protection Agency has agreed to propose, for one well, the modification requested by Akzo Salt, Inc. for its Underground Injection Control Permit No. NYU063860. The proposed modification, a change in the permitted injection fluid, allows the injection of up to 30,000 gallons of white mineral oil into the outer annulus of Well 58 for the purpose of controlling cavern growth. Page 28 of the permit has been revised. Akzo's request to make this permit modification automatically applicable to wells drilled in the future is denied. Authorization to inject white mineral oil into other wells will be determined on a case-by-case basis. A copy of page 28 of the draft modified permit is enclosed.

Also enclosed are the statement of basis, providing justification for the change, and the public notice. The publication of this notice will mark the beginning of the 30-day public comment period. You will be apprised of the publication date after a newspaper has been selected for the public notice, and you will be notified of any comments received during the comment period.

If you have any questions, please call Dermott Courtney of the
Underground Injection Control Section at (212) 264-6897.

Sincerely,

Richard L. Caspe, P.E.
Director
Water Management Division

Enclosures

cc: Peter Briggs, NYSDEC

DRAFT MODIFICATION

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E. Other Requirements

1. The permittee may inject only fresh water or fresh water mixed with waste brine into the Class III injection wells. Up to 30,000 gallons of white mineral oil may be injected into the outer annulus of Well 58 to control cavern development. Only white mineral oil that meets the requirements of the Food and Drug Administration as per 21 CFR 172.878 may be injected. The permittee must abide by all local, State and Federal requirements. Prior to the injection of oil into Well 58, the secondary containment structure described in the Spill Prevention, Control and Countermeasure Plan must be completed according to the specifications submitted by the permittee. Before oil injection may begin, Well 58 must pass a mechanical integrity test with the wellhead pressure at or above the maximum surface pressure the well will experience during oil injection. The volume of oil injected into Well 58 must be recorded in the quarterly report which follows each injection.
2. The volume of water injected shall not exceed 216,000 gallons per day per well.
3. The ratio of injected fluid volume to produced fluid volume shall be calculated daily and shall be less than 1.08.
4. If three volumes of a well cannot be evacuated before samples are taken, no analysis of the well fluids are required for that well.

Statement of Basis
for
Draft Modification of U.S. Environmental Protection Agency's
Underground Injection Control (UIC)
Class III Permit Number NYU063860

for

A solution salt mining project in Watkins Glen, New York operated by:

Akzo Salt, Inc.
Abington Executive Park
P.O. Box 352
Clarks Summit, Pennsylvania 18411-0352

On September 24, 1985, the Director of the Water Management Division signed a permit authorizing the construction and operation of injection wells at Akzo Salt's brine field at Watkins Glen, New York (the company was called International Salt Company at that time). The permit and a fact sheet for the permit are on file with the Environmental Protection Agency (EPA).

On August 19, 1993, Akzo Salt applied for a permit modification that would allow the injection of No. 2 fuel oil into wells as a means of controlling cavern development. EPA studied the proposal and responded on February 22, 1994 in a letter that expressed concern about the potential for fuel oil to discharge from the wellhead under pressure and enter Seneca Lake, a source of drinking water for Watkins Glen.

On February 28, 1994, Akzo Salt revised its application for the permit modification and requested authorization to inject white mineral oil instead of fuel oil. The white mineral oil meets the requirements of the Food and Drug Administration as per 21 CFR 172.878 and is approved for use in certain food products at very low concentrations.

EPA proposes to make this permit modification for one well that has been built specifically for this purpose. The modified permit authorizes Akzo Salt to inject up to 30,000 gallons of white mineral oil into the outer annulus of Well 58. The oil filling the annulus will force the injection water to dissolve first the lowermost of the three salt layers that will be mined by this well. Some oil can be removed to allow the injection water to rise within the annulus and dissolve the middle and the upper salt layers. Within each salt bed, the oil will form a pad along the top of the cavern, inhibiting dissolution upward and promoting dissolution outward. Through the removal of oil or through the thinning of the oil pad as the cavern expands outward, the effectiveness of the pad will eventually diminish to

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 Federal Plaza
New York, New York 10278

NOTICE OF DRAFT MODIFICATION OF UIC PERMIT
TO INJECT FLUIDS INTO INJECTION WELLS

Public Notice No. 94-

Permit No. NYU063860

Date:

Akzo Salt, Inc., Abington Executive Park, P.O. Box 352, Clarks Summit, Pennsylvania 18411-0352 has applied to the United States Environmental Protection Agency (EPA) under the provisions of the Safe Drinking Water Act, 42 U.S.C. 300f et seq. (the Act), for a major modification to its Underground Injection Control (UIC) permit to inject fluids into wells at its solution salt mining facility located at Watkins Glen, New York.

The permit allows the injection of fresh water or fresh water mixed with waste brine. The permittee has requested a permit modification to allow the injection of white mineral oil into wells as a means of controlling cavern growth. The oil will form a pad along the roof of the cavern to inhibit dissolution of salt upward and promote dissolution outward from the injection well. Removal of the oil or thinning of the oil pad as the cavern expands outward will diminish the effectiveness of the of the pad to the point where the dissolution of the salt will follow its natural tendency to occur upward rather than outward. The permit will be revised to allow the injection of up to 30,000 gallons of white mineral oil into the outer annulus of Well 58 in Akzo Salt's brine field at Watkins Glen. The white mineral oil to be used by Akzo meets the requirements of the Food and Drug Administration as per 21 CFR 172.878 and is approved for use in certain food products at very low concentrations.

This notice is being given to inform the public that EPA has prepared a draft modification of Permit No. NYU063860. This draft permit contains standards, prohibitions and other conditions necessary to carry out the provisions of the Act. If, after the conclusion of the proceedings summarized below, the Water Management Division Director of Region II of EPA makes a final decision to issue a permit modification, the permittee will be required to comply with all the conditions in that modified permit.

The draft permit modification prepared by EPA is based on the administrative record. The administrative record is on file in Room 845, EPA, Region II at the address below and may be inspected and copied at a charge of \$.15 per copy sheet at any

time between 8:30 A.M. and 4:00 P.M., Monday through Friday. A copy of the draft modified permit and other available information may be obtained by writing to the address below.

Interested persons may submit comments on the draft modified permit to the Chief, Drinking/Ground Water Protection Branch at the address below no later than July , 1994. All persons, including the permittee, who believe that preparation of a draft permit was not appropriate have an obligation to raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all support material, by the close of the public comment period. All supporting material must be submitted unless it is already included in the administrative record. If the Director of the Water Management Division finds that comments timely submitted appear to raise substantial new questions, he may reopen the public comment period and schedule a public hearing.

The permittee and any other person who submits timely written or oral comments or requests notice of the final permit-modification decision shall receive notice of the Division Director's final decision. Within 30 days of service of such notice, any interested person may petition the Administrator to review any condition of the permit-modification decision.

Written comments on the draft permit modification must be received by July , 1994. Please address comments to:

Walter E. Andrews, Chief
Drinking/Ground Water Protection Branch
U.S. Environmental Protection Agency
Room 845
26 Federal Plaza
New York, New York 10278
(212) 264-1800

Richard L. Caspe
Director
Water Management Division